

U.S. Patent Application Serial No. **10/728,883**  
Amendment filed September 21, 2006  
Reply to OA dated June 23, 2006

**REMARKS:**

Claims 1-4 and 6-9 are currently pending, of which claims 1-4, 6, and 7 have been amended herein. Claim 5 has been canceled herein without prejudice or disclaimer as to its subject matter.

- A.**     The Examiner has objected to Figures 3 and 4 and has suggested that such drawings should be designated by a legend such as "prior art."

Figure 3 relates to Japanese Patent Application Laid-open No. 2001-317817. Figure 4 relates to Japanese Patent Application Laid-open No. 2002-98414. The label "Conventional Art" has been added to Figures 3 and 4, which is consistent with the language used in the specification. This label has been added to Figures 3 and 4 so as to clearly distinguish these drawings from the other drawings. Thus, Applicants respectfully submit that this objection should be withdrawn.

- B.**     The Examiner has rejected claims 1, 2, and 5-7 under 35 USC 102(b) as anticipated by USP 5,843,291 (Eki '291).

Applicants respectfully traverse this rejection, for the following reasons.

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**Eki '291** fails to expressly or inherently describe the following features set forth in claim 1, as amended: "A water heater, comprising: a heat source; heat exchange means for receiving water, heating the received water, and supplying the heated water, said heat exchange means including a water pipe; and electrolytic water generating means for generating acid water and alkali water, wherein ... a removing operation of scale having salt as a main ingredient adhered to a water pipe of said heat exchange means is performed ... using the acid water produced by said electrolytic water generating means," in combination with the other claimed features.

**Eki '291** fails to expressly or inherently describe the following features set forth in claim 1, as amended: "if a hot water supplying operation time exceeds a preset value, a removing operation of scale having salt as a main ingredient adhered to a water pipe of said heat exchange means is performed for a predetermined time using the acid water produced by said electrolytic water generating means while the hot water supplying operation is stopped," in combination with the other claimed features.

Thus, Applicants respectfully submit that this rejection of claim 1 should be withdrawn.

**Eki '291** fails to expressly or inherently describe the following features set forth in claim 3, as amended: "A water heater, comprising: a heat source; ion exchange means for removing at least basic positive ion from received water; heat exchange means for heating water after the basic

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positive ion is removed; and electrolytic water generating means for generating acid water and alkali water, wherein ... a regenerating operation of said ion exchange means is performed ... using the acid water produced by said electrolytic water generating means," in combination with the other claimed features.

**Eki '291** fails to expressly or inherently describe the following features set forth in claim 3, as amended: "if a hot water supplying operation exceeds a preset value, a regenerating operation of said ion exchange means is performed for a predetermined time using the acid water produced by said electrolytic water generating means while the hot water supplying operation is stopped," in combination with the other claimed features.

In view of the above, it respectfully submitted that this rejection of claims 2 and 5-7 should be withdrawn by virtue of their dependency.

**C.**     The Examiner has rejected claims 1, 2, and 5-7 under 35 USC 102(b) as anticipated by USP 5,853,562 (**Eki '562**).

Applicants respectfully traverse this rejection, for the following reasons.

**Eki '562** fails to expressly or inherently describe the following features set forth in claim 1,

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as amended: "A water heater, comprising: a heat source; heat exchange means for receiving water, heating the received water, and supplying the heated water, said heat exchange means including a water pipe; and electrolytic water generating means for generating acid water and alkali water, wherein ... a removing operation of scale having salt as a main ingredient adhered to a water pipe of said heat exchange means is performed ... using the acid water produced by said electrolytic water generating means," in combination with the other claimed features.

**Eki '562** fails to expressly or inherently describe the following features set forth in claim 1, as amended: "if a hot water supplying operation time exceeds a preset value, a removing operation of scale having salt as a main ingredient adhered to a water pipe of said heat exchange means is performed for a predetermined time using the acid water produced by said electrolytic water generating means while the hot water supplying operation is stopped," in combination with the other claimed features.

Thus, Applicants respectfully submit that this rejection of claim 1 should be withdrawn.

**Eki '562** fails to expressly or inherently describe the following features set forth in claim 3, as amended: "A water heater, comprising: a heat source; ion exchange means for removing at least basic positive ion from received water; heat exchange means for heating water after the basic positive ion is removed; and electrolytic water generating means for generating acid water and alkali

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water, wherein ... a regenerating operation of said ion exchange means is performed ... using the acid water produced by said electrolytic water generating means," in combination with the other claimed features.

**Eki '562** fails to expressly or inherently describe the following features set forth in claim 3, as amended: "if a hot water supplying operation exceeds a preset value, a regenerating operation of said ion exchange means is performed for a predetermined time using the acid water produced by said electrolytic water generating means while the hot water supplying operation is stopped," in combination with the other claimed features.

In view of the above, it is respectfully submitted that this rejection of claims 2 and 5-7 should be withdrawn by virtue of their dependency.

**D.**     The Examiner has rejected claims 3, 4, and 6-8 under 35 USC 103(a) as obvious over Eki '291 or Eki '562 in view of JP 08-117745 (Iwamura '745).

Applicants respectfully traverse this rejection, for the following reasons.

**Eki '291, Eki '562, and Iwamura '745**, alone or in combination, fail to describe, teach, or suggest the following features set forth in claim 3, as amended: "A water heater, comprising: a heat

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source; ion exchange means for removing at least basic positive ion from received water; heat exchange means for heating water after the basic positive ion is removed; and electrolytic water generating means for generating acid water and alkali water, wherein ... a regenerating operation of said ion exchange means is performed ... using the acid water produced by said electrolytic water generating means," in combination with the other claimed features.

**Eki '291, Eki '562, and Iwamura '745**, alone or in combination, fail to describe, teach, or suggest the following features set forth in claim 3, as amended: "if a hot water supplying operation exceeds a preset value, a regenerating operation of said ion exchange means is performed for a predetermined time using the acid water produced by said electrolytic water generating means while the hot water supplying operation is stopped," in combination with the other claimed features.

Thus, Applicants respectfully submit that this rejection of claim 3 should be withdrawn.

**Eki '291, Eki '562, and Iwamura '745**, alone or in combination, fail to describe, teach, or suggest the following features set forth in claim 1, as amended: "A water heater, comprising: a heat source; heat exchange means for receiving water, heating the received water, and supplying the heated water, said heat exchange means including a water pipe; and electrolytic water generating means for generating acid water and alkali water, wherein ... a removing operation of scale having salt as a main ingredient adhered to a water pipe of said heat exchange means is performed ... using

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the acid water produced by said electrolytic water generating means," in combination with the other claimed features.

**Eki '291, Eki '562, and Iwamura '745**, alone or in combination, fail to describe, teach, or suggest the following features set forth in claim 1, as amended: "if a hot water supplying operation time exceeds a preset value, a removing operation of scale having salt as a main ingredient adhered to a water pipe of said heat exchange means is performed for a predetermined time using the acid water produced by said electrolytic water generating means while the hot water supplying operation is stopped," in combination with the other claimed features.

In view of the above, it is respectfully submitted that this rejection of claims 4 and 6-8 should be withdrawn by virtue of their dependency.

In view of the aforementioned amendments and accompanying remarks, all claims currently pending are in condition for examination.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the Applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

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In the event that this paper is not timely filed, the Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due now or in the future with respect to this application, to Deposit Account No. 01-2340.

Respectfully submitted,

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PATENT TRADEMARK OFFICE

Enclosure: Replacement Sheet of Drawings (Figs. 3 and 4)